

### REMARKS

Upon entry of the amendments made herein, claims 1-4, 6-7, 9-14, 19, 21, 23-26, 30-40, 56, 58-68, 82, 103-143, 145-147, 1 and 49-154 will be pending in this application. Claims 8, 16, 144 and 148 have been cancelled herein without prejudice or disclaimer. Claims 5, 15, 17-18, 20, 22, 27-29, 41-55, 69-81, and 83-102 remain cancelled. Applicants have amended claims 1-2, 9-10, 32, 82, 103-141, 150 and 154 for clarity. No new matter has been added.

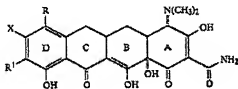
### Double Patenting

Claims 1-4, 6-14, 16, 19, 21, 23, 24, 30-40, 82, and 140-154 remain rejected under obviousness-type double patenting as being unpatentable over claims 1 and 26-54 of co-pending Application No. 10/839,023. Upon notice of allowable subject matter in Application No. 10/839,023, Applicants will consider filing a Terminal Disclaimer.

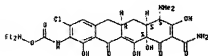
### Rejections under 35 U.S.C. 102

#### Sum

Claims 1-4, 6, 11-13, 16, 19, 21 and 82 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,430,162 ("Sum"). Specifically, the Examiner indicated that the Sum teaches a genus of compounds of:



including the species of:



and that R<sup>9</sup> of the instant claims is substituted alkylamino. (*See* Office Action at pages 2-3).

Claim 16 is cancelled herein. Therefore, the rejection is moot as applied to this claim and should be withdrawn.

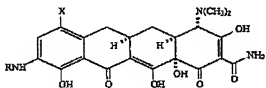
Applicants traverse this rejection with respect to the remaining claims as amended herein.

In order to anticipate a claim, a reference must teach each and every element of the claim. (*See*, MPEP §2131). Applicants submit that the instant claims require R<sup>8</sup> to be hydrogen and that X in the Sum compounds, which is equivalent to R<sup>8</sup> in the instant claims, cannot be hydrogen. Specifically, Sum states that X is selected from trifluoromethanesulfonyloxy or halogen. Therefore, Sum does not teach each and every element of claims 1-4, 6, 11-13, 19, 21 and 82.

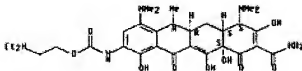
Applicants respectfully request that this rejection be withdrawn.

### Hlavka

Claims 140-146, 148-150 and 154 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,494,903 ("Hlavka"). Specifically, the Examiner indicated that Hlavka teaches compounds of the formula:



and the species of



• HCl

(*See* Office Action at page 3). Further the Examiner indicates that Hlavka reads on the instant claims wherein R<sup>9a</sup> is substituted alkylamino. (*See* Office Action at page 3).

Claims 144 and 148 are cancelled herein. Therefore, the rejection is moot as applied to these claims and should be withdrawn.

Applicants traverse this rejection with respect to the remaining claims as amended herein.

Again, in order to anticipate a claim, a reference must teach each and every element of the claim. (See, MPEP §2131). Applicants submit that claims 140 and 154, from which the remaining rejected claims depend, both require R<sup>9</sup> to be a d NR<sup>9c</sup>C(=Z')ZR<sup>9a</sup>, where Z' is an oxygen or sulfur and Z is oxygen. R<sup>9a</sup> is selected from unsubstituted or substituted C<sub>3</sub>-C<sub>10</sub> alkyl, substituted or unsubstituted C<sub>4</sub>-C<sub>10</sub> alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted alkoxy, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylsulfanyl, substituted or unsubstituted alkylsulfonyl, substituted or unsubstituted arylsulfonyl, substituted or unsubstituted alkoxycarbonyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted arylalkyl, substituted or unsubstituted aryl, substituted or unsubstituted heterocyclic, substituted or unsubstituted heteroaromatic, wherein said substituted alkyl is substituted with halogen, hydroxyl, alkoxy, alkylcarbonyloxy, alkoxyloxy, arylcarbonyloxy, alkoxycarbonylamino, alkoxycarbonyloxy, aryloxyloxy, carboxylate, alkylcarbonyl, alkylamino, arylalkyl aminocarbonyl, alkenylaminocarbonyl, alkylcarbonyl, arylcarbonyl, arylalkylcarbonyl, alkenylcarbonyl, alkoxycarbonyl, silyl, aminocarbonyl, alkylthiocarbonyl, phosphate, aralkyl, phosphonate, phosphinate, cyano, acylamino, amido, imino, sulfhydryl, alkylthio, sulfate, arylthio, thiocarboxylate, alkylsulfanyl, sulfonate, sulfamoyl, sulfonamido, nitro, cyano, azido, heterocyclyl, alkylaryl, aryl or heteroaryl; further wherein said substituted alkenyl, substituted alkynyl, substituted alkoxy, substituted alkylthio, substituted alkylsulfanyl, substituted alkylsulfonyl, substituted arylsulfonyl, substituted alkoxycarbonyl, substituted arylcarbonyl, substituted alkylamino, substituted arylalkyl, substituted aryl, substituted heterocyclic, or substituted heteroaromatic is substituted with halogen, amino, alkyl, alkenyl, alkynyl, hydroxyl, alkoxy, alkylcarbonyloxy, alkoxyloxy, arylcarbonyloxy, alkoxycarbonylamino, alkoxycarbonyloxy, aryloxyloxy, carboxylate, alkylcarbonyl, alkylamino, arylalkyl aminocarbonyl, alkenylaminocarbonyl, alkylcarbonyl, arylcarbonyl, aminoalkyl, arylalkylcarbonyl, alkenylcarbonyl, alkoxycarbonyl, silyl, aminocarbonyl, alkylthiocarbonyl, phosphate, aralkyl,

phosphonato, phosphinato, cyano, acylamino, amido, imino, sulfhydryl, alkylthio, sulfate, arylthio, thiocarboxylate, alkylsulfinyl, sulfonato, sulfamoyl, sulfonamido, nitro, cyano, azido, heterocyclyl, alkylaryl, aryl or heteroaryl. R<sup>9a</sup> cannot be alkylamino or alkyl substituted with aminoalkyl.

In contrast, at the 9-position in the Hlavka compounds, the substituent is NHR, where R can be R<sup>4</sup>(CH<sub>2</sub>)<sub>n</sub>CO-, and R<sup>4</sup> can be, among other things, amino.

As such, R<sup>9</sup> of the instant claims cannot be equivalent to RNH of formulas I and II in Hlavka. Therefore, the Hlavka does not teach each and every element of claims 140-143, 145-146, 149-150 and 154.

Applicants respectfully request that this rejection be withdrawn.

#### **Rejections under 35 U.S.C. 112**

Claims 103-139 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Examiner indicates that the claims contain subject matter, the "prodrug form," which was not described in the specification in such a way to reasonably convey to a skilled artisan that the inventors, at the time the application was filed, had possession of the claimed invention. (*See* Office Action at page 4). Specifically, the claims alternatively claim a "prodrug...thereof" form of the compounds described and that the definition provided in the specification does not sufficiently convey to one skilled in the art what is being claimed because it incorporates a metabolic process which is entirely unknown. (*See* Office Action at page 4-5). Applicants traverse this rejection with respect to the claims as amended herein.

Specifically, Applicants have amended claims 103-139 so that they no longer recite "prodrug." As such, Applicants believe that this rejection has been overcome and should be withdrawn.

**CONCLUSION**

Applicants respectfully submit that this application is in condition for allowance. An action progressing this application to issue is courteously urged. If the Examiner is of the opinion that further discussion of the application would be helpful, the Examiner is respectfully requested to telephone the Applicant's undersigned. The undersigned is authorized to act on behalf of the Applicant under 37 C.F.R. §1.34.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Heidi A. Erlacher', is written over a horizontal line.

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